

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application.

**Listing of the Claims:**

Claim 1. (currently amended) An array ~~comprising~~ consisting of a plurality of nucleic acid probes, wherein each probe in the plurality of nucleic acid probes consists ~~essentially~~ of one of the sequences listed in SEQ ID Nos. 1-124,031 and wherein the plurality of nucleic acid probes of the array ~~comprises~~ consists of each of the sequences listed in SEQ ID NOS. 1-124,031.

Claim 2. (currently amended) The array of claim 1 further ~~comprising~~ consisting of a second plurality of nucleic acid probes, wherein each probe in the second plurality of nucleic acid probes consists ~~essentially~~ of the complement of one of the sequences listed in SEQ ID NOS: 1-124,031 and wherein the second plurality of nucleic acid probes ~~comprises~~ consists of the complement of each of the sequences listed in SEQ ID NOS: 1-124,031.

Claim 3. (currently amended) The array of claim 2 further ~~comprising~~ consisting of a third plurality of nucleic acid probes, wherein each probe in the third plurality of nucleic acid probes consists ~~essentially~~ of the sequence of one of the sequences listed in SEQ ID NOS: 1-124,031 except with a mismatch at the central position.

Claim 4. (original) The array of claim 1 wherein each probe is attached to a bead.

Claims 5-7 (canceled)